

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. F. ROBERTS.

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Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER.**

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, NOV. 10, 1835.

THE SILK MANUAL.

Sinclair & Moore and Robert Sinclair, Jr., proprietors of the *Farmer and Gardener*, Baltimore, announce to the public that they will publish in the course of the present week, a *complete Manual of the Mulberry and Silk Culture*, compiled by the editor of said paper, from the most approved works upon the subject. It will contain—1. a brief historical view of the silk business—2. directions for sowing the Mulberry seed, nurturing the Mulberry plant, transplanting it into hedges, or standard orchards, and the subsequent management thereof—3. the mode of preserving and hatching the silk-worm eggs; the manner of rearing and feeding the worms, the mode of airing the laboratories, and the prevention and treatment of their several diseases—4. the manner of constructing a cheap laboratory or cocoonery—5. the process of reeling, dying, and making sewing silk, twist, &c., together with calculations of the probable net produce of given quantities of land set in Mulberry, as tested by actual results, both in this country and Europe. In which calculations it will be clearly and satisfactorily demonstrated that an acre of ground properly cultivated in Mulberry, is capable of feeding a sufficient number of worms to realize from the silk raised therefrom, after defraying all expenses of cultivation, a sum exceeding \$560. In addition to the interesting matter contained in the manual, which is full upon every subject connected with the culture, it will have a copious and well digested *Index*, made so easy that any thing required can be found without difficulty. In fine it will comprise every thing that a farmer who desires to enter into the culture need know.

Orders for the above work will be received, post paid, for any number of copies, by either the editor or proprietors. As the number of copies in pamphlet form will be limited, and numerous orders have already been received, persons wishing to secure a supply will do well to make early application.

BOOKSELLERS, POSTMASTERS AND STORE KEEPERS at a distance, can have their orders promptly filled.

CORN SHELLERS, AND STRAW CUTTERS.

As the season has arrived when both these labor saving machines should be called into the

service of farmers, we take the liberty of reminding them, that if they value time, and appreciate economy, they should not lose a moment in procuring one of each.

The CORN SHELLER with the vertical iron wheel, is, beyond comparison, one of the most powerful machines ever invented. It is capable, by hand-power, to shell 20 bushels of corn an hour, and this without occasioning any great distress to the person engaged. Among the striking good qualities which it possesses, and which so recommend it to favor, the very little room that it occupies, is certainly not the least, nor should its great simplicity be overlooked. Besides the astonishing velocity with which it does its work, thus enabling the farmer to overcome time in the getting of his crop of corn to market, it does it so cleanly, and so entirely deprives the cob of all its grains, that one is lost in amazement that so small and unpretending an implement, in appearance, could perform with so much certainty and effect.

Of STRAW CUTTERS, there are kinds out of number, and at prices as variant; ranging, as in size, from \$5 to \$75: thus, very properly, suiting the price to the quantity of work to be performed, and the ability of the farmer to buy. It used to be said in the good old days of the eighteenth century, when utility was consulted more than fashion, that no gentleman should ever dream of going to farming without a wife—and truly, there is much of the genuine philosophy of human nature in this opinion: for in the name of all the Saints, what comfort is there about a house, whether it be a town or country one, unless there be a wife in it? In fact, the house without a wife, and a good one, is more insufferable than the plagues of Egypt! And if a wife be indispensable to the comfort of the domestic hearth, and who doubts it,—is not a straw cutter as essential to the comfort and economy of the barn yard? It enables the farmer to reduce his coarse straw, hay, corn stalks, and corn husks, so that his horses and cattle can eat them without waste, and with perfect ease to themselves: provender cut in this way, and steamed or scalded, will go one-third farther, and of course the farmer saves one-third, and as the old saw has it, a penny saved, is a penny gained. If then with the aid of one of these provender-economists, the farmer is enabled

to send one-third more hay to market, would not interest tell him that he should buy a straw cutter and get rich on saving?

THE BLIGHT IN FRUIT TREES.

Washington County, Nov. 5th, 1835.

Mr. Editor—Through the medium of your invaluable paper, I wish to gain a piece of information in which I as well as farmers generally are deeply interested; which is, to know the cause of smut or blight on the body of young apple trees, causing the side so affected to decay and be worm eaten: and what remedy must be applied to prevent a total decay of the trees so affected.

A Washington County Farmer,
And a Subscriber.

REPLY BY THE EDITOR OF THE FARMER AND GARDENER.

The books are very full upon the subject of the blight in fruit trees, and while one portion of the writers ascribe it to the injurious effect of fogs and easterly winds at particular seasons of the year, another with more plausibility, according to our poor opinion, impute it to the effect of insects penetrating the coatings of the bark, and thus producing a rankerous exudation of the sap and ultimate decay of the tree. A correspondent, in Bradley's treatise on gardening, instances a garden which was exempted from blight owing to its proximity to a saltpetre refinery, while others in its vicinity, but removed beyond the influence of the steam from this establishment, suffered severely. He, therefore, concludes that the specific agent in the *prevention*, was the steam, or nitrous vapor proceeding from the saltpetre, and that it destroyed the eggs of the insects as well as the insects themselves. If this suggestion be correct, then a fumigation of the trees with saltpetre would prove efficacious; but were we to make an effort to destroy the cause of the blight, we should combine sulphur with the saltpetre; and precede either or both, by washing the diseased part, if not the whole tree, with a strong solution of tobacco and chloride of lime, and when that had been absorbed and exhaled, we would pass a brush dipped in spirits of turpentine over all the diseased parts. The aroma of this essential oil is not only offensive to almost all vermin; but particularly so to those which infest fruit trees.

Trees diseased with the blight have been frequently cured by being washed in stale urine—kept for a month or two before being used. The stale urine have repeatedly succeeded, when appli-

cations of it in a new state, have proved of no use whatever. We are not surprised that this difference in result should have taken place, because, there is certainly no article which so materially changes by keeping. While newly made chamber-ley is perfectly tolerable to the human sense of smell, that of a month or two old is so insufferable, that one would well nigh as lief come in contact with the pestiferous exhalations of the pole-cat as with it. Whether this greatly increased quantum of noxious aroma, is owing to the evaporation of the more purely aqueous parts of the liquid, leaving a substance highly charged with animal, resinous, and oleaginous matter, held in solution, is not material. It is very certain that, in its condensed form, it throws out a most unsavory effluvia, which, we presume, would prove as disagreeable to the insect tribe as it does to the biped race.

Strong solutions of soot, and salt, put on with a brush, have in numerous instances effected cures.

In parts of Upper Canada, soft soap made hot and put on with a brush, of the consistence of paint, has had the effect not only to remove the diseased bark, but to replace it by a new healthy one, and to resuscitate the trees completely.

Dr. Mease says that Mr. Cooper, of New Jersey, by accident discovered some years since, that a tree upon which a number of iron hoops and other articles of iron had been hung, remained free from blight, while all the rest suffered severely. Since that year he has constantly encircled two or three branches of every tree with an iron hoop and with uniform success.

It is recommended to paint the body of the tree with a mixture of water and rich unctuous clay, brought to the consistence of paint.

Washing the trees with solutions of Chloride of lime, is also spoken highly of.

MARL.

We were sent a few weeks since by a subscriber in Perquimans county, North Carolina, a specimen of shell marl found on the estate of Mr. John G. Wilson of Murfreesboro, in that state. It is one of the richest parcels we have ever seen, composed almost entirely of small shells, so soft as to be cut with ease with a knife, and in that state that they will very readily fall into powder by being spread on the ground, and submitted to the action of the atmosphere. It struck us on inspection that it contained fully 80 per cent. of lime; but on shewing it to Mr. Philip T. Tyson, a most skilful and experienced chemist, after examining it, he said it did not contain more than 70 per cent., but that it was among the richest specimens he had ever seen, and was fully equal to the best shell marl found on the eastern shore of this state; that it would not require the action of fire to prepare it for the soil, but would do, in its then state, to spread thereon.

To the owner of the estate on which this calcareous deposit has been found, as well as to the neighborhood, it will prove an inexhaustible source of wealth, and we trust a free use will be made of it, and that such experiments will be tried as will test its relative value as a manure.

GREAT PRODUCE OF RYE.

Mr. Warham Kingsley, of Westhampton, sowed in 1884, two bushel. of rye on two acres and

twenty rods of land, (including rocks and stumps) owned by Mr. Anthony Fisher, and harvested the same in the year 1885, which produced one hundred shock, ten of which having been threshed and cleaned, yielded thirteen bushels and four quarts of rye—and he believes there will be one hundred and thirty bushels of rye, when it is all threshed and cleaned.

WORK FOR NOVEMBER.

This delightful month has come in as soft and balmy as the "distilling dews of evening," and would seem to remind one, that, as it is among the most prolific in the Calendar, in its dedications to the shrine of love, so should its breathings be equally as inspiring and tempting to the husbandman, in urging him forward in the performance of his autumnal toils—toils so full of comfort for the present, and of promise for the future. And while we are thus blessed with delightful weather, let us embrace the occasion, to lay the ground work of good crops the ensuing year, so that each and all of us may have the consolation of knowing, that we have discharged our respective duties as farmers and planters, with integrity of purpose and fidelity of execution: and first of all, let us begin with

THE FARM.

This is a month when an immense quantity of labor must be performed on the farm, if you desire to reap a fruitful coming harvest. As your woods are now plentifully supplied with fallen leaves, gather them up together with the mould which has been formed by the decay of those of former years; haul the whole into your barn-yard, and if you have a stercory or manure house, deposit it therein; if you have no such convenience, spread it over your barn-yard to be trodden upon by your cattle during winter, and to act as a recipient to absorb their urine. In this way you may accumulate a body of manure equal to any demands which your corn and potato crops may make upon you, if manured in the drills. If, however, you should not have force at command to enable you to accomplish this, do not omit to procure and carefully stow away, where they will be protected from the weather, an ample supply of leaves for litter for your stalls through the winter: you will be thus enabled to save your straw for feed for your cattle, or for sale, and to realize infinitely more than the cost of collecting and hauling in the leaves.

If you would wish to save your Apple orchard from the ravages of the Canker worm, you must be up and doing. The grubs or millers which lie snugly ensconced at the bottom and around the trees must be arrested. To do this effectually, dig the earth from around the trees to the distance of 5 or 6 feet from the trunks, put it up in piles and burn it thoroughly; sprinkle unslaked lime,

reduced to powder, around the surface of the roots from which you have scraped the earth. After the earth shall have been burned and cooled down, replace it, and you will thus effect two desirable objects: the action of the fire on the earth will have destroyed the canker worm in the first place, and, in the second, so meliorated the earth itself, as to be equal to a manuring. But if your trees are infested with this destructive insect, you must not stop here. Scrape the bark around the trunk, and encircle it with a list, or cloth, on which mercurial ointment has been spread.—Bandages of tar, and coal tar, have been also recommended; but as these require almost, if not daily, renewals, their efficacy is greatly jeopardized by the difficulty of making the requisite number of applications. The mercurial ointment possesses the advantage that a single one is sufficient: and in addition to these, if the trunk and limbs of the trees were washed with a solution of potash, much good would arise.

The Apples for winter keeping should be carefully collected and put away, and those for cider should be, as speedily as possible, put through the process, taking care before barreling up the liquid, to cleanse and sulphur your casks well.

If you have any cows that you expect to calve in a few weeks, be careful to give them, in addition to your dry food, good supplies of steamed or boiled roots, as potatoes, carrots, parsnips, beets, turnips, mangel wurtzel or ruta baga, with occasional mixtures of Rye slops, which latter, they should receive twice a day, at least three weeks before calving; and it would be all the better, if permitted to become acid before being given to them. If you have no fixture for steaming, have one put up, no matter how coarsely, it will answer; and take our word for it, if you have a dozen animals to feed, you will save its cost in a month. All your corn stalks, corn husks and straw, may, by the process of cooking, be converted into substances nearly as nutritive as the best timothy or clover hay, with this advantage, that one-third less will answer than when fed to them uncut and uncooked.

If you have any heifers near calving, as this is their first essay in the way of mothers, you should be especially careful with them; and be sure to give them good succulent messes of rye and meal slops, as well as generous allowances of steamed or boiled roots. Much depends upon your treatment of them now, whether they make good milk cows or not. If you desire they should be deep milkers, you must take the necessary steps, and use the proper means to ensure it. By giving them succulent slops, somewhat acidulated for some weeks prior to calving, you en-

courage the disposition in the animals to secrete milk, without endangering the birth of their young, by the accumulation of fat. And after they have calved and are well over it, the calf should be tied up. By this means, the *milk ducts, or vessels, will be distended and capacity and volume given to them, as well as to the udder of the cows.* The calves should be permitted to suck but three times a day, and if intended for veal, gruel made of Indian meal, occasionally of linseed meal, and force-balls, composed of meal and eggs, moistened with milk, should be given them. By permitting the calves to run with their mothers, they suck as their appetites may dictate, always leaving a portion of the milk unstript, and hence it is that cows imbibe the habit of *holding up*, a thing so provoking to the dairy-woman. Whereas if you tie the calves up, and let their mothers into them at regular stated hours, they go to the work of sucking with a keen and eager appetite, and as they know they have to make the most of their time, they tug at their mothers' teats until they yield them the last drop of milk which may have been secreted.

Your corn must be all husked and carefully stored away beyond the reach of rats and other vermin, and such part as you may design for sale, should be shelled out the first spare moment you have, in order that you may be ready to take it to market whenever the price may justify your selling.

When the period arrives for gathering your turnips and other late roots, do so without delay, and be prompt in placing them beyond the destructive influence of the frost and vermin.

In feeding roots to your stock, always use those first that are most perishable.

Attend to the condition of your fences; mend those that may require it, and put up new ones where you need them. Cut up the weeds in your fence corners, and if convenient to lime, make a compost consisting of weeds, mould and lime, in the proportion of $\frac{1}{2}$ mould, 3-8 weeds and 1-8 lime; treated thus, they will make excellent manure for use in the spring.

FALL PLOUGHING.—If you have any stiff soil that you intend for spring crops, plough it deeply, and throw your fallows in large slices, so as to leave as much of the newly turned up earth exposed as possible. If there be a tolerable vegetable carpet on it, a top dressing of lime will have a most salutary effect.

If you have any fields filled with that pest of farmers, *Garlic*, do not fail to plough them forthwith; let hands follow the plough with rakes, gather up the roots and burn them on the spot,

and repeat your ploughing during the winter.—By pursuing this course and cultivating them in spring and summer crops, which will require ploughing or hoeing frequently, you may in a year or two clear your lands of it.

If you design planting out *fruit, ornamental, or other trees*, now is the time; seize the first occasion to carry your intentions into operation. In selecting a site for an orchard, avoid valleys, low, and wet grounds.

With respect to the transplantation of fruit trees—now is the season for setting out *apples, pears, quinces, plums, cherries, peaches, nectarines, apricots, almonds, walnuts, filberts*, and, indeed, every other kind of hardy fruit trees.

KITCHEN GARDEN.

Thin out your spinach, corn-salad and winter cresses, and keep them free from weeds. The weeding should be done before the frosts set in.

Asparagus beds.—If you omitted dressing your asparagus beds last month, you must delay it no longer, but do it forthwith, as we then directed. Let your lettuce in frames have the advantage of free air every mild day, putting on the glasses again in the evening. Sow your small salading, of all kinds, on hot beds. Plant your *garlic, romaine and shallots*. Your cabbage and cauliflower plants should be aired every good day to ensure them to stand the cold. Take the glasses off during the middle of each day, putting them on again at night. Before the hard frosts set in, take up and secure your cabbages.

Your late cauliflowers and Broccoli, which are producing their heads, should be attended to: break down some of the largest leaves, so as to cover and protect the flowers from the effects of the weather.

Your *turnips, carrots, parsnips, beets, salsify*, &c. must be gathered and put away securely.—Blanch, immediately, your *celery, cardoons and endives*. Sow your *rhubarb, kale*, and such other seeds as may be seasonable, not forgetting to weed your young *onions*.

Gooseberries, currants and raspberries, should be transplanted this month.

FLOWER GARDEN.

Your bulbous and tuberous roots, of almost all descriptions should be set out this month, the earlier the better, as it is desirable that they should take root before the hard frosts set in.—Previous to which a good covering of half decayed tanner's bark, leaves and well rotted manure should be spread over the beds, and the alleys and sides should be protected by long manure, or straw.

Tuberose, Dahlias, Tigridias and *Amaryllis*,

as soon as the frost has injured their foliage, should be taken up, dried thoroughly in the sun, or in a room where there is a fire. When perfectly dry, pack them in boxes, in dry sand or moss, previously divesting them of their foliage and fibres, and store them away in a warm room or dry cellar, where they will at all times be exempt from frosts. For your *Primroses, Polyanthus* and *Daisies*, which were planted last month, have a frame in readiness, to protect them through the winter: they should also have a slight covering of leaves.

Choice *Pinks, Carnations* and *Auriculas*, which are in pots should be placed in the frame intended to preserve them during the winter. The pots should be sunk in tan, half decayed leaves or saw dust, up to their rims. During severe weather, and, indeed, throughout the winter, the glasses should be covered, except through the middle of the day, with matting or plaited straw. Cleanse your garden of all weeds, and remove the fallen leaves from your walks, taking care to put the whole upon your manure heap, where they must be covered over with earth.

In conclusion, we would observe, that the prudent agriculturists, horticulturists, and florists, must keep their eyes open, their judgment fresh and unclouded, and their energy, industry and resolution always unimpaired, and ready for exertion, whenever and wherever they may be required, whether on the plantation, or in the kitchen or flower garden.

ON STEAMING FOOD FOR HORSES.

"It has been ascertained, though perhaps not generally known, that *grain of any kind cannot be dressed or cooked by dry steam applied to the dry grain*. If the steam is at a low pressure, or a little above that of atmospheric, a species of parching is produced on the grain so treated; and if steam of a very light pressure is applied, the grain may be entirely carbonized. An intermediate and very simple process, has however been found, whereby grain of any sort can be completely boiled, which is done by soaking the grain in water for a period of from six to twelve hours, according to its state of dryness; and then placing it in the receiver described for steaming roots, and applying steam for an hour, the grain will come out completely boiled. From this it may be inferred, that each grain becomes a little caudron, containing as much absorbed water as serves to boil it by the application of steam; but whatever be the rationale of it, we are thus provided with a simple and efficient steaming and boiling apparatus, applicable alike to the cooking of juicy roots or tubers, and dry grains.

That horses on a farm may be kept more economically on prepared food than in the state and manner in which food is usually administered to them, we have no doubt. The fact, however, will soon be ascertained in consequence of the

premium which the Highland Society has just now announced on the subject. The results of the experiments which some farmers will make, will, we fondly anticipate, prove the facility of preparing food, and economy in the use of it.—We have the authority of the owners of some of the coaching and posting establishments in Edinburgh, for stating that the saving which will arise from the use of prepared food, in the keep of forty horses, will amount to 140*l.* a year. We have also the high authority of Mr. Dick, the Professor of Veterinary Surgery in Edinburgh, for saying that the general health of horses under work, is much better on prepared than unprepared food.

‘It will appear obvious,’ says Mr. Dick, ‘that the grand desideratum is to give food containing as much nutriment, and in as small bulk, as it is consistent with the economy of the animal. If this problem is solved, it will follow, as a corollary, that it will be important to give that food which has been found best suited to its proportions, in such a state as is best suited for digestion. This is a point, however, worthy of consideration; and naturally suggests the question, how is the body supplied with nourishment by taking in food into the stomach? The common notion is, that much depends, as I have indeed before mentioned, on the hardness of the food; and it is a common saying, in order to show off a horse which is in a good condition, ‘that he has plenty of hard meat in him.’ Now this is a very silly and erroneous idea, if we inquire into it; for, whatever may be the consistency of the food which is taken into the stomach, it must, before the body can possibly derive any substantial support or benefit from it, be converted into chyme—a pulaceous mass; and this as it passes onwards from the stomach into the intestinal canal, is rendered still more fluid by the admixture of the secretions from the stomach, the liver and the pancreas, when it becomes of a milky appearance, and is called chyle. It is then taken into the system by the lacteals; and in this fluid, this soft state, and in this state only, mixes with the blood, and passes through the circulating vessels for the nourishment of the system.

‘Now if the hardest of the food must in this manner be broken down and dissolved before it can really enter into the system, it must appear evident that something approaching to this solution, if done artificially, would greatly aid the organs of digestion in this process, and that thereby much exertion might be saved to the system, and at the same time nourishment would be rapidly conveyed into it. It is with this view that I would recommend the general adoption of cooking food for horses.’

SUGAR CROP IN LOUISIANA.

The editor of the Baltimore Chronicle is indebted to the politeness of a commercial house in this city for the following extract of a letter from a respectable planter in Louisiana:

‘As I previously mentioned, the Sugar crop is very short. Many planters went make a hhd. and if they make seed for the coming year, it will be the extent. I expect to make $\frac{1}{2}$ of a crop.—Contracts have been made here at 7*½* to 8*½*, and now I believe 8*½* could be got. It is generally thought 30,000 hhd. will not be made in the

State. Several of our grocers who have had nerve, have made \$20 to 30 a hhd. on sugar, and are selling old sugar at \$9*½* to 10. You may rely on the correctness of this information.”

ON THE USE OF LIME AS A MANURE.

By M. PUVIS.

Translated for the Farmers' Register from the *Annales de l'Agriculture Française*, of 1835.

[The publication of the following communication to the *Annales de l'Agriculture Française*, was commenced in the February No. of that journal, (which was received here in May,) and the June No. contains the end of the first part, “On Liming,” and enables us to offer the translation of that portion to our readers. Only a few pages of the next proportion of the series, “On marling,” has yet appeared, and not enough to permit a judgment to be formed of its worth.

Though there are many deficiencies in this treatise on liming—and also opinions as to the theory of the action of lime, in which we cannot coincide—still, on the whole, we consider it as presenting far more correct views, and more satisfactory information, both on theory and practice, than any other work on liming that we have before seen. In other points, and those of most importance, the facts here presented, (and now first learned from any European authority,) strongly sustain the views maintained in the *Essay on Calcareous Manures*. It would be both unnecessary and obtrusive to remind the reader of these points of difference, and of agreement, whenever passages exhibiting either may occur. They will therefore generally be submitted in the author's words, without comment. A few exceptions only to this rule will be made, in cases which appear particularly to call for them.

We have no information whatever of M. Puviss, the author of this treatise, previous to the appearance of the commencement of the publication in the *Annales*. But he is evidently well informed on this subject, and is stated by the introductory remarks of the French editor, to be entitled to all respect, for his long experience, and his practical, as well as scientific investigation of the subject. If then there remains no ground to distrust his judgment or his facts, the statements made are most important to a very large portion of this country, which has heretofore been generally supposed to be deprived of all possible benefit from the use of calcareous manures, on account of their remoteness and high price of carriage. M. Puviss states that the most successful and profitable liming in Europe (for the expense incurred) is in repeated applications of very small dressings—making less on the average, than four bushels of lime to the acre, annually. This small amount, if really as efficacious as is alleged, would cost so little in labor and money, that the limits of the region capable of being limed may be very far extended. It would not matter though the applications should require to be repeated forever, provided the annual returns gave good profit upon the annual expense: and far greater will be the profit if (as we think) the soil ultimately will no longer require such repetitions—or only at very distant intervals of time—and still be a highly productive, because it has been made a calcareous and fertile soil. *Ed. Far. Reg.]*

On the different modes of improving the soil.

To improve the soil is to modify its composition in such manner as to render it more fertile.

This definition, which might be extended to manures charged with vegetable mould [*humus*] or animal substances, which also modify the composition of the soil, is limited by French agriculture to substances which act upon the soil, or upon plants, without containing any notable proportion of animal or vegetable matter.

It is said that manures, [putrescent or enriching,] serve for the nutriment of plants. But it is the same as to substances improving to the soil, which furnish to it matters which it needs to be fruitful, and which furnish to vegetables, the earths and saline compounds which enter as essential elements in their composition, their texture, and their products. Such improving substances ought well to be regarded as nutritive.*

Thus lime, marl, and all the calcareous compounds employed in agriculture, since they furnish lime and its compounds, which sometimes form half of the fixed principles of vegetables, ought also to be considered as aliments; or, what comes to the same, as furnishing a part of the substance of vegetables. Thus again, wood-ashes, pounded bones, burnt bones, which furnish to vegetation the calcareous and saline phosphates which compose a sixth of the fixed principles of the stalks, and three-fourths of their seeds, ought well to be considered, and surely are, nutritive.

What then particularly marks the distinction between manures which improve the soil [*amendemens*], and alimentary manures, [*engrais*], is, that the former furnish, for the greater part, the fixed principles of vegetables, the earths, and salts, which are not met with ready formed, neither in the soil nor in the atmosphere: while alimentary manures furnish a small part of the volatile principles which are abundantly diffused throughout the atmosphere, whence vegetables draw them, by means of suitable organs: and what is most remarkable, is, that the vegetables, by receiving the fixed principles of which it has need, acquires, as we shall see, a greater energy to gather for its sustenance the volatile principles which the atmosphere contains.

The greater part then of soils, to be carried to

*The two classes of manures which are described generally above, are conveniently designated in French each by a single word. “*Engrais*,” which we can only translate as *manure*, is limited in signification to such substances as directly enrich soils, and feed growing plants—and “*amendemens*,” signifying substances which alter and improve the constitution, texture, and indirectly, the fertility of soil, but the operation of which is not to furnish food to plants. In speaking of the action of these different classes, the sense may be rendered, though not very precisely, by the words “enrich,” and “improve”—but there is no one English term that will convey the meaning of either class of substances. “Alimentary manures” will be used for the first class, and “manures improving the constitution of soil,” or some similar awkward, but descriptive phrase, can only render the meaning of the word “*amendemens*”—unless “improves” could be tolerated as a substitute, for convenience. *Tr.*

the highest rate of productiveness, require manures to improve their constitution. Alimentary manures give much vigor to the leafy products—but they multiply weeds, both by favoring their growth and conveying their seed—and they often cause crops [of small grain] to be lodged, when they are heavy. Manures which improve the soil, more particularly aid the formation of the seeds, give more solidity to the stalks, and prevent the falling of the plants. But it is in the simultaneous employment of these two means of fertilization by which we give to the soil all the active power of which it is susceptible. They are necessary to each other, doubling their action reciprocally: and whenever they are employed together, fertility goes on without ceasing—increasing instead of diminishing.

The greater part of improving substances are calcareous compounds. Their effect is decided upon all soils which do not contain lime, and we shall see that three-fourths, perhaps, of the lands of France are in that state. The soils not calcareous, whatever may be their culture, and whatever may be the quantity of manure lavished on them, are not suitable for all products—are often cold and moist, and are covered with weeds.—Calcareous manures, by giving the lime which is wanting in such soils, complete their advantages, render the tillage more easy, destroy the weeds, and fit the soil for all products.

The improving substances have been called *stimulants*; they have been thus designated because it was believed that their effect consisted only in stimulating the soil and the plants. This designation is faulty, because it would place these substances in a false point of view. It would make it seem that they brought nothing to the soil, nor to plants—and yet their principal effect is to give both principles which is wanting. Thus the main effect of calcareous manures proceeds from their giving, on the one hand, to the soil the calcareous principle which it does not contain, and which is necessary to be able to develop its full action on the atmosphere—and on the other hand, to vegetables, the quantity which they require of this principle, for their frame-work and their intimate constitution. It would then be a better definition than that above, to say that to improve the soil is to give to it the principles which it requires, and does not contain.

Importance of manures which improve the constitution of soils.

The question of improving manure is of great interest to agriculture. This means of meliorating the soil is too little known, and above all, too little practised in great part of France—and yet it is a condition absolutely necessary to the agricultural prosperity of a country. In the neighborhood of great cities, alimentary manures being furnished on good terms, may well vivify the soil: but animal manure cannot suffice but in a few situations, and of small extent—and in every country where tillage is highly prosperous, improving manures are in use. The department of the North (of France), Belgium, and England, owe to them, in a great measure, their prosperity. The Department of the North, (which is, of all Europe, the country where agriculture is best practised, and the most productive,) spends every year, upon two-thirds of its soil, a million of francs in lime, marl, ashes of peat, and of dead coal [hou-

elle;*] and it is principally to these agents, and not to quality of the soils, that the superiority of its production is owing. The best of its soil makes part of the same basin, is of the same formation, and same quality, as a great part of Artois and Picardy, of which the products are scarcely equal to half the rate of the North. Neither is it the quantity of meadow land which causes its superiority; that makes but the fifth part of its extent, and Lille, the best *Arrondissement*, has scarcely a twentieth of its surface in meadow, while Avesne, the worst of all, has one-third. Nor can any great additional value be attributed to the artificial meadows, since they are not met with except in the twenty-sixth part of the whole space. Neither can this honor be due to the suppression of naked fallow, since in this country of pattern husbandry, they yet take up one-sixth of the ploughed land, every year. Finally, the Flemings have but one head of large cattle for every two hectares† of land, a proportion exceeded in a great part of France. Their great products then are due to their excellent economy and use of manures, to the assiduous labor of the farmers, to courses of crops well arranged, but, above all, we think, to the improvers of soil, which they join to their alimentary manures. Two-thirds of their land receive these regularly: and it is to the reciprocal reaction of these two agents of melioration, that appears to be due the uninterrupted succession of fecundity, which astonishes all those who are not accustomed continually to see the products of this region.

At this moment, upon all points in France, agriculture, after the example of the other arts of industry, is bringing forth improvements; in all parts especially, cultivators are trying, or wishing to try, lime, marl, ashes, animal black. It is this particular point in progress, above all, for which light is wanting; and this opinion has induced the preparation of this publication. Since more than 30 years, the author has devoted himself, from inclination, to agriculture; but he has been especially attentive to calcareous manures. He has studied in the practice of much extent of country, in his own particularly, in personal experiments, and in what has been written on them both by foreigners and countrymen. An *Essay on Marl*‡ has been the first fruit of his labours; an *Essay on the use of lime* will soon be ready; it is with these materials that he now sets himself to work. To prepare for this object, a series of articles, of the nature of a recapitulation rather than of a regular

*Statistique du département du Nord.

†The hectare is very nearly equal to two and a half English (or American) acres. See account of French weights and Measures, p. 506, Vol. II. Farm. Reg.—Tr.

‡*Essai sur la marne*, published 1826, at Paris. This is the first notice which we have had of the existence of this work, and have forthwith sent for a copy, as well as for one of the author's forthcoming *Essay on the use of lime*, that no source of information on this important subject may be excluded. But it may be inferred (from the author's expressions,) that these more extended works will contain nothing more of what is essential, than is presented in this condensed form, prepared by himself for the *Annales*. Ed. FARMERS' REC.

work, it was necessary to be concise, and yet not to omit any thing essential. It is proper then that he should limit himself to the prominent parts of his subject, those especially useful to practice. His advice will then be as often empirical as regular, and his directions will be precise, although supported by a few developments.

An extract from this work has appeared in the *Encyclopédie Agricole*: here it will again appear, but by separate articles, which will be corrected by a systematic general view of theory, founded on practice. This is the moment for multiplying publications on this subject, because that in almost all parts of France, it is the point in agriculture most controverted—that which induces the most labor and the greatest expenditures—which presents most doubts—and which has consequently most need of being made clear.

We shall not enlarge here upon the manner in which improving manures act: we will put off this important question, with its developments to the article on lime. Here we only present the theory. Hereafter, that which we will hazard will be founded upon facts, and yet we will not promise these developments, but for the purpose of enlightening and directing practice.

Of the various kinds of improving manures.

The first in order, and the most important, are the calcareous manures. We comprehend under this name, lime, marl, old plastering mortar, and other rubbish of demolished buildings, beds of fossil shells, [*fatun*]* or shelly substances, plaster or gypsum, experiences and reason will prove that we ought to arrange in the same class, and by side of the others, wood ashes, ground bones, and burnt bones. We will not place in the same list the ashes of peat, of dead coal, and red pyrites ashes: their effect is not owing to their lime, but (as will be seen afterwards) rather to the effect of fire upon the earthy parts, and particularly upon the argil which they contain.

We will next in order treat of manures of the sea, of saline manures of different kinds of mixtures of earths, of calcined clay: and finally, of paring and burning the turf, and the different questions which peat presents in agriculture.

Of liming—on the use of lime for the improvement of soil.

1. Among the immense variety of substances, and of combinations which compose the upper layers of the globe, the earthy substances, silica, alumina, and lime, form almost exclusively the surface soil: the greater portion of other substances being unfit to aid vegetation, they ought to be very rare upon a surface where the supreme authority willed to call forth and to preserve the millions of species of beings of all nature which live on its products.

It was also a great benefit to man, whose intelligence was to be exercised upon the surface of the soil, to have so few in number the substances

**Fatun*—Beds formed by shells. There is one of these immense beds in Touraine. The cultivators of that country use this shelly earth to improve their fields. This definition is from Ruzier's *Cours Complet*, and though it clearly shows that the substance in question is the same as what is called "marl" in Virginia, it is equally clear that neither of these authors consider *fatun* as being marl. Tr.

proper to support vegetation. The art of agriculture, already so complex, which receives from so many circumstance such diverse modifications, if there had been added new elements much more complicated, would have been above the reach of human intelligence.

2. But among these substances, the two first, silex and alumine, form almost exclusively three-fourths of soil; the third, the carbonate of lime, is found more or less mixed in the other fourth: all soils in which the latter earth is found, have similar characters, producing certain families of vegetables which cannot succeed in those in which it is not contained.

The calcareous elements seem to be in the soil a means and a principle of friability. Soils which contain calcareous earth in suitable proportions, suffer but little from moisture, and let pass easily, to the lower beds, the superabundant water, and consequently drain themselves with facility.—Grain and leguminous crops, the oleaginous plants, and the greater part of the vegetables of commerce, succeed well on these soils.

It is among these soils that almost all good lands are found. Nevertheless, the abundance of the calcareous principle is more often injurious than useful. Thus it is among soils composed principally of carbonate of lime that we meet with the most arid and barren, as Lousy Champagne, part of Yonne, and some parts of Berry.

3. The analysis of the best soils has shown that they rarely contain beyond 10 per cent. of the carbonate of lime; and those of the highest grade of quality seem to contain but from 3 to 5 per cent. Thus the analyses of Messrs. Berthier and Drapiez, show 3 per cent. of it in the celebrated soil of the environs of Lille.

4. But all these proportions, all these advantages, all these products, calcareous manures bear with them to the soils which do not contain the calcareous principle. It is sufficient to spread them in very small proportions: a quantity of lime which does not exceed the thousandth part of the tilled surface layer of soil, a like proportion of drawn ashes, or a two-hundredth part (or even less) of marl, are sufficient to modify the nature, change the products, and increase by one-half the crops of a soil destitute of the calcareous principle. This principle then is necessary to be furnished to those soils which do not contain it; it is then a kind of condiment disposed by nature to meliorate poor soils, and to give them fertility.

Ancient date of the use of lime.

5. Lime, as it appears, has long ago been used in many countries. However, nothing proves that its effect was well known to the Greeks and Romans, the then civilized portion of mankind.—Their old agricultural writers do not speak of the use of lime on cultivated lands, nor on meadows. Pliny, the naturalist, tells us however, that it was in use for vines, for olives, and for cherry trees, the fruit of which it made more forward: and he speaks of its being used on the soil generally in two provinces of Gaul, those of the Pictones and Edui,* whose fields lime rendered more fruitful. The agriculture of the barbarians was then, in this particular, more advanced than that of the Romans. After that, all trace of the use of lime in agriculture, is lost for a long time—whether

that it had ceased to be used, or only that the notice of it was omitted by writers on agriculture. The trace is again recovered with Bernard Palliasey, who recommends the use of it in compost in moist lands, and speaks of his use of it in the Ardennes. Nearly a century later, Olivier de Serres,† advises its employment in the same manner, and reports that they made use of it in the provinces of Gueldres and Juliers [in Belgium.] He makes no mention of its use in France: but as the practices of agriculture were not then much brought together, and were but little known, it may be believed that at that time, Flanders, Belgium, and Normandy, made use of lime.

In England, liming seems to have been in use earlier and more generally than in France. But then, and in all time since, good agricultural practices have remained in the particular countries where they were established, without being spread abroad. Now, novelties carry no alarm with them—and in the last twenty years, liming has made more progress than in the two preceding centuries.

Of soils suitable for liming.

6. Lime, as it has been said before, suits the soils which do not contain it already. To distinguish these soils from others, chemical analysis is, without doubt, the surest means; but it offers often too many difficulties, and lime may be met with in a soil in proportion great enough to exert its power on vegetation, without producing effervescence with acids.‡ But visible characters may furnish indications almost certain. The soils where the cow wheat [*melampyre*], rest-harrow, [*Ponouis, ou arrete-bœuf*], thistles, colt's foot, [*tussilage*], and red poppy, spring spontaneously—which produce well in wheat, legumes, (or plants of the pea kind,) and especially sainfoin—where the chestnut succeeds badly—which shows but little of dogstooth, [*chiendent*], volunteer grasses, or common weeds, [*graminees adventices*], except of the small leguminous kinds—soils which after being dry, crumble with the first rain—all these are almost certainly calcareous, have no need of lime, nor its compounds,* and would feel from their use, rather ill than good effects.

On the contrary, all soils composed of the moulderings [*debris*] of granite or schistus, almost all sandy soils, those which are moist and cold of the immense argilo-siliceous table lands [*plateaux argilo-siliceux*] which separate the basins of great rivers—the ground where the fern,

† Who wrote on agriculture in the reign of Henry IV. of France. Tr.

‡ This is a full though indirect admission of the truth of the doctrine of *neutral soils*, maintained in the Essay on Calcareous Manures. Tr.

* Though both the truth and the usefulness of this passage, in general, are admitted, yet it is incorrect, in the position that none of the "compounds of lime" would be advantageously employed on calcareous soils. On the contrary, the sulphate of lime (gypsum) the most important compound as a manure, next to the carbonate, is most effective where the land has lime in some other form: and indeed (as has been maintained elsewhere) it seems generally inert and useless on soils very deficient in lime.—*Essay on Calcareous Manures*, pp. 50, 92.

the little rush [*petil ajone*] the health, *les petites carex blanches*, the whitish moss spring spontaneously—almost all the soils infested with *avoins à chapelets*, with dogs-tooth, with bent grass [*agrostis*], red sorrel, and the little feverfew—that soil where, unless so clayey as to offer great difficulty to cultivation, only rye, potatoes, and buckwheat, can be made, and where sainfoin and the greater part of the crops of commerce cannot succeed—where, however, trees of all kinds, and especially the resinous kinds, the wood-pine, the sea-pine, the larch, the northern pine, and the chestnut, thrive better than in the best land—all these soils are without the calcareous principle, and all the improving manures in which it is found, would give to these the qualities of, and nourish the growths peculiar to calcareous soils.

But there, more than elsewhere, it is especially necessary to avoid too much haste. Liming upon a great scale, ought not to be done, until after having succeeded in small experiments on many different parts of the ground designed to be improved.

(To be continued.)

¶ The character of the lands called by the author "*plateaux argilo-siliceux*," and which he refers to frequently in the course of his essay, can only be gathered from the context. They are poor, intractable under tillage, and but little pervious to water. The name indicates their composition to be siliceous and aluminous earth almost entirely. It may be inferred that such lands resemble in soil the elevated level ridges which in lower Virginia separate different water courses, and especially those which in addition to being miserably poor, are remarkably close, stiff, and "water-holding"—and are in some places called "cold livery land," "pipe-clay," or "cray-fish" soils. Soil of this kind, and of the most marked character, is particularly described at page 40, Essay on Calcareous Manures, 2d ed. M. Puvis elsewhere, speaks of this "*argilo-siliceux*" soil as being found every where in France, and as known in different places under the various names of "*terrain blanc*," "*blanche terre*," in the south, "*boulbenne*," in the north, of "*terre clytre*," and "*terre a bois*"—and in the basin of the Loire, "*terre de Sologne*." The last name would direct us to the lands of Sologne, which furnish it, as it may be presumed, as being of like quality. Arthur Young says "Sologne is one of the poorest and most unimproved provinces of the kingdom, and one of the most singular countries I have seen. It is flat, consisting of a poor sand or gravel, every where on a clay or marl bottom, retentive of water to such a degree that every ditch and hole was full of it." Tr.

MARYLAND HORTICULTURAL SOCIETY, SATURDAY, Oct. 31st, 1885.

The following articles were exhibited, viz:

By Mrs. Philip Littig, 3 very large Radishes.

By H. B. Chew, specimens of Celery and green Peas.

By Mrs. John Lester, 4 fine Beets.

By Mr. James Howard, a sample of very fine potatoes.

By Mr. Valentine, 3 fine Cape Broccoli.

By Dr. James T. Johnson, of Frederick, a very large Radish.

* *Edui et Pictones calce uberrimos fecere agros.*

By Wm. Jessup, of Baltimore county, a peck of very fine Potatoes and 4 Radishes.

By Samuel Feast, a specimen of fruit of the Bourbon Strawberry.

By Joseph King, Jr., 22 varieties of Chrysanthemums.

By Mrs. Geo. H. Keerl, 27 varieties of Chrysanthemums.

By Miss —, a fine bouquet of Chrysanthemums.

By Mrs. Hugh Birkhead, a fine bouquet of Chrysanthemums.

By Mrs. Robert A. Taylor, specimens of Chrysanthemums.

By Mr. Edward Kurtz, 22 varieties of Chrysanthemums.

By Mr. John Feast, the crimson daisy flowered Chrysanthemums, a new variety.

At 12 o'clock, the Committee awarded the weekly premium to Mr. Valentine, for his fine Cape Brocoli. GIDEON B. SMITH, Cor. Sec'y.

ADVICE TO FARMERS.

Farmers, take care not to send your corn to market too early this fall—wait, and let it get thoroughly dry, about the middle of December. In the first place, you will by this escape the probable damage to your corn, and the certain loss in the price. Some new corn has already been sent up in the ear, which has been in a bad state. There is scarcely a bushel of old corn to go up, and to supply the place of old corn, you must have the new in a very dry state; it will bring you a much better price, for it will be worth more; besides new corn is worth a great deal more in December than in the month of November. Farmers generally complain of the unusually green state of their corn* at this season, and of their disappointment in the crops not coming up to expectation.

Easton (Md.) Gaz.

[*We have heard of corn growing in the ear on the stalk in an adjoining county. Ed. Far. and Gard.]

FOREIGN ABSTRACT.

Advices to the 8th of October have been received from Europe. There is but little of interest from any part of the continent of Europe to notice. O'Connell has returned from Scotland to Ireland, having pronounced a violent philippic against the Americans, on account of the existence of slavery among us; he denounced them as "traitors to the cause of human liberty," before the society of venerable old ladies who deputed the hiring Thompson to come here and cast his firebrand among us. For ourself we disregard what such hired patriots either say or think of us; he has already taxed his countrymen £90,000 for his patriotism! The affairs of Spain appear to be mending, and those of France are as quiet as a volcano immediately preceding its outbreak.

From the correspondent of the N. Y. Daily Advertiser—Liverpool, 8th Oct. 1835—The sales of Cotton for the week ending on the 2d instant, were only 11,520 bags, viz:

6110 Upland at 7½a11; 6350 Orleans 7a12; 2120 Alabama 7 7-8a11; 80 Sea Island 8½a36; 1160 Brazil 11½a14; 280 Egyptian 14a16; 510 East India 6½a8; 190 W. India 14½a15. Total 16,800 bags.

Later by two days.—Money continues scarce in London. Toreno had been ejected from the Spanish ministry, and Mendizabel had taken his place. The former had rendered himself very unpopular with the liberal party, and given rise by his hostility to free principles to the disaffection which had recently manifested itself: the latter is decidedly a favorite, and his appointment had reconciled the friends of the Cortes; the junctos had already sent in their adhesion, and a new era had already beamed upon Spain.

Errata.—We regret the occurrence of the following errors, which occurred in the communication of our highly esteemed correspondent *Me-libæus*, published in our 24th number, and now recur to them with a view of correcting them, as a matter of justice to the enlightened author of that excellent essay, not that we are at all apprehensive they will be ascribed to him by the critical reader; for the printer rightfully bears all such sins; but merely make them to guard the writer from even the possible imputation of inattention to the more rigid rules of syntax; for no one capable of appreciating the grasp and power of thought contained in the essay would dream of any thing else.

In the 5th line from the top of the first column, page 188, after the word "tried," insert "it."

In the 19th line, same column, for "ideas" read "idea."

In the 32d line, same column, between the words "last century," insert "half," so as to read "last half century."

In the 7th line from the bottom, same column, for "29th March," read "31st March."

In the 23d line from the top, in the 3d column, same page, the sentence beginning thus: "If such a principle had influence, generally the determinations of man"—should read, "If such a principle had influenced generally the determinations of man," &c.

In the first column, p. 189, 28th line from the top, strike out the word "in" after the word "interest," and insert, "on."

In the 2d column, same page, 9th line, after the word "topics" insert the word "on."

CONTENTS OF THIS NUMBER.

Annunciation of the publication of the Silk Manual—utility of corn shellers and straw cutters—the blight in fruit trees—a rich specimen of marl from North Carolina—great produce of rye—work for November—value of steamed food for horses—sugar crop in Louisiana—on the use of lime as a manure—proceedings of the Md. Horticultural Society—advices to farmers—foreign abstract—errata—advertisements—prices currents, &c.

STOCK OF IMPROVED SHORT HORN DURHAMS.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable; all tracing to the British Herd book. They will be sold low for cash, their excellence being considered. To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid. nov 10 4t

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

VIRGINIA.	
U. S. Bank,.....par	Farmers Bank of Virginia 2½
Branch at Baltimore,....do	Bank of Virginia,.....do
Other Branches,.....do	Branch at Fredericksburg do
MARYLAND.	
Banks in Baltimore,....par	Petersburg,.....do
Hagerstown,.....1a	Norfolk,.....do
Frederick,.....do	Winchester,.....do
Westminster,.....do	Lynchburg,.....do
Farmers' Bank of Mary'd, do	Danville,.....do
Do. payable at Easton,....do	Bank of the Valley,....do
Salisbury,.....5 per ct. dis.	Branch at Romney,....1
Cumberland,.....1a	Do. Charlestown,....do
Millington,.....do	Do. Leesburg,.....do
DISTRICT.	
Washington,.....Banks, 1.	Wheeling Banks,.....1½a2
Georgetown,.....do	Ohio Banks, generally 2½a3
Alexandria,.....do	New Jersey Banks gen. 1½a2
PENNSYLVANIA.	
Philadelphia,.....1a	New York City,.....1a
Chambersburg,.....1a2	New York State,.....2½a3
Gettysburg,.....do	Massachusetts,.....2a24
Pittsburg,.....1½a2	Connecticut,.....2a24
York,.....1a	New Hampshire,.....2a24
Other Pennsylvania Bks. 1½a2	Maine,.....2a24
Delaware [under 5]....3a4	Rhode Island,.....2a24
Do. [over 5].....2a2	North Carolina,.....2½a3
Michigan Banks,.....5a	South Carolina,.....2½a3
Canadian do,.....5a	Georgia,.....2a24
	New Orleans,.....4

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	11	
Shoulders,....do.....	"	10	
Middlings,....do.....	"	8½	9
Assorted, country,.....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	26
Roll,.....	"	20	
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	3 00	6 00
COWS, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 15	2 00
CHOP RYE,.....	"	1 63½	1 75
EGGS,.....	dozen.		
FISH, Shad, No. 1, Susquehanna, barrel.		7 75	
No. 2,.....		6 75	
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk, of the cows, and for the activity and sprightliness of the oxen that they would be admirably suited to the purposes of southern agriculturists.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener. nov 10 4t

FOR SALE.

THREE fine young bulls—the one 3 years old, and the other two, two years old, each. These animals are crosses of the Improved Short-horn Durham, and Alderney breeds, and would be valuable acquisitions to any gentlemen wishing to breed either for the dairy or for beef, as the progeny of such crosses, combine in an eminent degree both the qualities of taking on fat, and of yielding copious supplies of milk.

For prices, enquire of the editor of the Farmer and Gardener. Terms, cash. nov 3 3t

LEON.

THE splendid bull LEON, is now at Clairmont Nursery, where he will remain a few weeks. He is a full blooded Improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hie's as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper. no 3

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 60	—
CATTLE on the hoof,	100 lbs.	4 50	5 25
Corn, yellow,	old, 95 to 98	bushel.	new 50 to 65
White,	do 95 to 98	do	do 5 to 65
Cotton, Virginia, .....	..	184	—
North Carolina, .....	..	—	—
Upland, .....	..	184	20
FEATHERS, .....	..	37	40
FLAXSEED,	pound.	1 25	1 37 1/2
FLOUR—BAL—Best wh. wh. fam.	bushel.	7 00	—
Do. do. in gr's, .....	..	6 00	6 12
Do. do. Superfine, .....	..	6 00	6 25
Superflow, st. in good do's	..	6 00	6 25
“ “ wagon price, .....	..	6 00	6 12
City Mills, extra, .....	..	6 25	6 37 1/2
Do. do. .....	..	5 87	6 00
Susquehanna, firm & warco	..	6 12 1/2	6 25
Rye, .....	..	4 40	4 62 1/2
Kiln dried & cal. in hides	..	19	19 50
do. in bbls. .....	..	4	4 12 1/2
GRASS SEED, red Clover,	bushel.	5 00	5 75
Timothy (harder of the north)	..	2 75	3 25
Orchard, .....	..	2 25	3 00
Tall meadow Oat, .....	..	2 00	2 50
Hard, or red top, .....	..	1 00	1 25
HAY, in bulk,	ton.	—	15 00
Hemp, country, do. rotted,	pound.	6	7
“ “ water rotted, .....	..	7	8
Hoot, on the hoof,	100 lb.	7 00	7 50
Slaughtered, .....	..	—	—
Hens—first sort,	pound.	12 1/2	—
second, .....	..	10	—
refuse, .....	..	8	—
LIME,	bushel.	33	35
MUSTARD SEED, Domestic, .....	..	8 00	6 00
OATS, .....	..	32	34
PEAS, red eye,	bushel.	—	—
Black eye, .....	..	1 25	—
Lady, .....	..	—	—
PLASTER PARIS, in the stone,	ton.	—	3 50
Ground,	barrel.	1 25	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAIS,	pound.	8	4
RYE,	bushel.	78	80
Susquehanna, .....	..	—	—
Tobacco, crop, common,	100 lbs	5 00	5 50
“ brown and red, .....	..	5 00	7 00
“ fine red, .....	..	7 00	9 00
“ waxy, suitable	..	—	—
“ for cigars, .....	..	5 00	10 00
“ yellow and red, .....	..	8 00	12 00
“ good yellow, .....	..	11 00	16 00
“ fine yellow, .....	..	12 00	16 00
Seconds, as in quality, .....	..	4 75	5 00
“ ground leaf, .....	..	5 00	8 00
Virginia, .....	..	6 00	—
Rappahannock, .....	..	—	—
Kentucky, .....	..	8 00	14 00
WHEAT, white,	bushel	1 30	1 35
Red, .....	..	1 25	1 30
WHEAT, 1st pf. in bbls,	gallon.	37	37 1/2
“ in hds, .....	..	33 1/2	—
“ wagon price, .....	..	30	—
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 50	—
To Wheeling, .....	..	1 75	—
Wool, Prime & Saxon Fleeces,	pound.	62 to 75	3 to 3 1/2
Full Merino, .....	..	62	69 30 3 1/2
Three fourths Merino, .....	..	47	52 28 30
One half do, .....	..	42	47 26 28
Common & one fourth Meri, .....	..	38	42 25 26
Fulled, .....	..	38	42 26 28

Wagon price best bakers' Flour 6
No change in Wool—in good demand at quotations

TO AGRICULTURISTS—The analysis of Soil, manure, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by
TYSON & FISHER, Chemists,
Druggists, No. 172 Market Street, Baltimore.

A SPLENDID DURHAM BULL.

THE editor of the Farmer and Gardener has for sale that beautiful and improved Durham short horn bull, **LEON**. He was 3 years old on the 8th of August last, and has been well taken care of; his color is pure white, with a hide as glossy as satin; he is perfectly docile, and is a bull of a common fine temper, and although but a few days off a travel of between 70 and 80 miles, and has been fed all the season on grass, is in fine condition.

Any person wishing to possess himself of one of the best blooded animals in the country, will do well to apply speedily. The following is his

PEDIGREE.

The improved Durham short horned BULL **LEON**, bred by Wm H. Freeman, Esq. of Baltimore. Calved on the 8th of August, 1830; now in the possession of S. Canby, of Woodside, Del.

"Leon" is by Gloucester, dam Flora.
"Gloucester" was in ported in July, 1826, by Mr. J. H. Powell, calved Feb. 25th, 1827, (bred by J. Whitaker, Esq. one of the most celebrated breeders in England) by Frederick, dam Adela, (bred by Mr. Whitaker; gave with her first calf 24 quarts per day) by (Cyprian; g d Alfred, (bred by J. r. r. enter, gave 21 quarts per day) by Alfred, (200 guineas was refused for Alfred) gr g d by Windsor, gr g d Old Daisy, (bred by Mr. C. Collings, gave 32 quarts daily) by Favorite, sire of Comet; gr gr g d by Funch; gr gr gr g d by Hubback.

"Frederick," roan, (bred by Mr. Charge) got by Hulton, dam Orin, by Comet; (Comet sold for 1000 guineas; g d Splendor by Comet; g d Flecker-Twin by Major; gr g d Red Simon by Favourite; gr gr g d Flecker-Twin by Earle; gr gr gr g d Old Simon, (bred by Mr. Charge), descended from the Studley White Bull.

"Hulton," (bred by Mr. Charge,) got by Newton, dam Victor by Comet.

"Newton," (bred by Mr. Charge) got by Comet, dam Fanny by J. r. Charge's Grey Bull.

"Comet," red and white roan, calved in 1804, (bred by Mr. Collings,) got by Favourite, dam Young Phoenix, by Favourite; g d Phoenix by Foljambe, &c. &c. (Comet was sold for 1000 guineas at Mr. Collings sale, 1st 11th, 810.)

"Gloucester's" pedigree can be found more at large in a work called "Hints for American Farmers," published by the Pennsylvania Agricultural Society, in 1827—he is also recorded in the English Herd Book.

"Flora," (dam of Leon) was got by Sampson, dam Petty, g d Old Betty; Sampson by son of (Asian, d. by Comet; Asian by Favourite; Favourite by Trolingbrook; d. Phoenix by Foljambe; g d Aleck's Bull; gr g d by Smith's Bull; gr gr g d by Jolly's Bull.

"Flora's" pedigree can also be found at large in the "Annals of the Pennsylvania Agricultural Society for 1824, and is likewise recorded in the English Herd Book. J. H. Powell, Esq. considers "Gloucester" one of the finest bulls ever in ported by him.

MULBERRY TREES AND SEEDS.

100,000 Chinese Mulberry or Morus Multicaulis of various sizes and from 25 to 30 per 100.

150,000 white Italian Mulberry at very low rates by the 1000 or larger quantity.

200 lbs. white Italian Mulberry seed.

Also the following superior large sized trees which now form a Mulberry orchard—but must be removed:

2000 Chinese Mulberry 3 years old 7 1/2 to 8 feet high.

2000 do do 2 do 5 1/2 to 6 do

2000 do do 3 do and budded on the

White Mulberry which have proved to be much more hardy than those from cuttings.

These 6000 trees are the greatest acquisition that any silk culturist can possibly obtain, and there is not another equally valuable collection for sale in the Union, as those who have such will not part with them.

50,000 cuttings of the Chinese mulberry at reasonable rates by the 1000, &c.

Fruit and Ornamental Trees of all kinds, Garden seeds, Bulbous roots, Green-house plants, and every other article promptly supplied and at very moderate prices.

Wm. PRINCE & SONS.

oct 20

FOR SALE,

A HEIFER rising a year old, with a pedigree which makes her a 13-16th bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.

no 3

1000 D. Z. POTATO ONIONS.

This very excellent and remarkable production was introduced into England a few years since, from Egypt. It is not produced from seed, but by off-sets from the roots, like tulips and hyacinths, (is there a certain crop) and from its extraordinary fecundity, and other estimable qualities, has already (where it is known) become one of the most valuable garden products. Like the root, whose name it bears, this useful vegetable multiplies under ground, each bulb producing a cluster of onions, no way inferior to the best of the species. The following is the mode of culture, and we would remark that fall planting is the true method—one reason why many have failed in an abundant crop has been by planting in the spring instead of fall—they require only the slightest protection in winter. But to the directions as stated by an experienced cultivator.

"By the 1st of August, or as soon as the tops fall and wither, take them out of the ground, and lay them several days in the sun; then put them away in a dry place until October or November; they should then be re-set like tulips. The beds intended for them should be previously well wrought, and the plants set in rows about a foot apart. The small or young ones should be separated from the others, for these grow larger, but produce no offspring the first year. Before the approach of winter, some coarse litter may be spread over them, which should be removed in the spring—and they will vegetate and produce a plentiful crop. They ripen in June, and are universally esteemed for their mild and agreeable flavor."

For sale by R. SINCLAIR, Jr.
At Sinclair & Moore's Ag. Rep'y, on Light-st.
nov 1

CHOICE DOUBLE LARK-SPUR SEED.



The subscriber offers for sale, put up in packets of 12 1/2 cts each, the most beautiful *Delphinium Ajacis Pleno*, ever flowered in this country. The seed was grown the present season, and this splendid flower is thus described by the experienced horticulturist of whom the seed was procured: "The trusses of flowers are above a foot in length, on a stately stem of near three feet, are as double as roses; in fact they more resemble Hyacinths, and combine every shade of color from the darkest purple to the most delicate lilac, and from the most beautiful pink to snowy white, with emerald green centres; but in order to have them of this rich description, it is necessary to sow the seed early in the month of October, as real gardeners know that spring sown seed will not flower half as well as that put down in the fall—it should be sown in a little bed by itself, of light rich soil, well pulverized with the spade and rake—on the approach of winter cover it with straw or brush as you would a innage, which remove in the month of April, after which keep the ground loose and clean. Larkspurs should not be transplanted." A 12 1/2 cent paper embraces all the varieties mixed together.

TULIP US ROOTS.

A superior collection of BULB US ROOTS, consisting of Hyacinth and Tulip Roots of various sorts and colors, Narcissus, Ranunculus, Crocus, &c. Printed directions will be furnished.

Now receiving from our Seed Garden, Europe, &c. a full collection of GARDEN SEEDS, growth 1835, among which are many sorts fine Peas, Onion Seed, Parsnip, Carrot, Beet, Yellow Turnip, Radish, &c.

Also for sale—500 dozen P. TATO ONIONS, a very mild Onion and immense product. They should be planted about the last of October.

R. SINCLAIR, Seedsman,
Light, 4 doors N. of Pratt st.

oc 13

NOTICE TO CAPITALISTS.

THE undersigned having been engaged for a number of years past in the Linnean Garden & Nurseries at this place, in a department where he has had every opportunity of becoming thoroughly acquainted with the business, wishes to form a connection with some person of capital, either as active or silent partner, for the purpose of carrying on the Nursery & Garden Seed business. To a person wishing to engage in a lucrative business, it is an opportunity rarely to be met with. Any communications addressed to the subscriber, will be treated as strictly confidential.

G. R. GARRETSON,
Flushing, L. I.—Sept. 1st, 1835.

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